

DESIGN

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SIMPLE JEWELRY

Soldering

Carlton Atherton

Continued from February Issue



R. H. Maryon, in his excellent professional book, says: "Soldering is the art of joining together separate pieces of metal by running between them some other metal or alloy, which will closely adhere to their surfaces and bind them together. The metal or alloy used for this purpose is known as solder. It must have a lower melting point—require less heat to melt it—than the metal of which the

work is composed, so that a temperature high enough to melt the solder will leave the work uninjured. But the melting point of the solder should approach as nearly as may be conveniently possible to that of the work, for a more perfect and stronger joint is thus produced. 'The essence of true soldering,' says Mr. Hiorns, 'is that there should be a certain amount of inter-fusion or alloying between the solder and the metal to be soldered, an intimate union of the two thus taking place.'"

There are mainly two types of solder, hard solder and soft solder. Hard solders melt at a point above red heat and approaching that of the melting point of the metal to be soldered. Soft solder requires comparatively little heat. Hard solder makes much better and stronger joints than soft, and should be used exclusively.

In silver work there are two kinds of hard solder, hard and easy flowing. For most purposes in simple jewelry, hard flowing solder should be used.

Soldering should really be undertaken, in the beginning at least, in the spirit of a game. The sporting spirit is the only one to have, as there are sure to be disappointments at first. No matter what craft one works in, there is always, until good technique is acquired, a gamble with chance in one part or another. Even after one's technique is good, there is still a chance to be taken with failure. One successful attempt, however, more than repays for several failures.

For soldering the following materials are necessary:

Blow torch, Hard flowing silver solder gauge 30, Metal shears, Borax slate, Jeweler's borax, Scraper, Small sable brush, Sulphuric acid, Charcoal block, Iron binding wire gauge 30, Tweezers, Earthenware bowls, one for acid, one for water.

The gas torch with a foot bellows, an automatic alcohol torch or an alcohol mouth torch, may be used. Full directions come with both the gas torch and the automatic alcohol torch. Directions will be given only for the mouth torch.

The alcohol mouth torch is simply a cylinder closed at one end and holding cotton waste or miner's cotton which is saturated with alcohol. The mouth tube is about 18 inches long. The end with the mouth piece is left free; the other end is fastened to the cylinder in such a way that the current of air, blown from the mouth, crosses the flame, directing it at right angles to the cylinder.

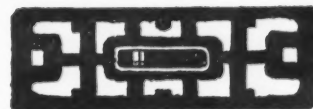
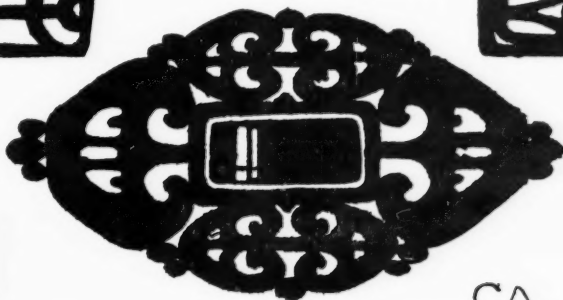
If a mouth torch is used, it is necessary to practice continuous blowing, as removing the flame from the piece of work for an instant, in soldering, both cools it and oxidises it at the same time, thus losing time, work and heat and making the next attempt much more difficult. With a little practice one can blow a continuous blast of air through the tube.

Never exhaust the supply of air in the lungs. Before a breath is needed, the cheeks should be puffed out and used as a reservoir. They should be contracted slowly and the tongue brought up at the same time. This forces the air in the mouth out through the tube. A fresh supply of air should be inhaled at the same time through the nostrils. This can be continued indefinitely.

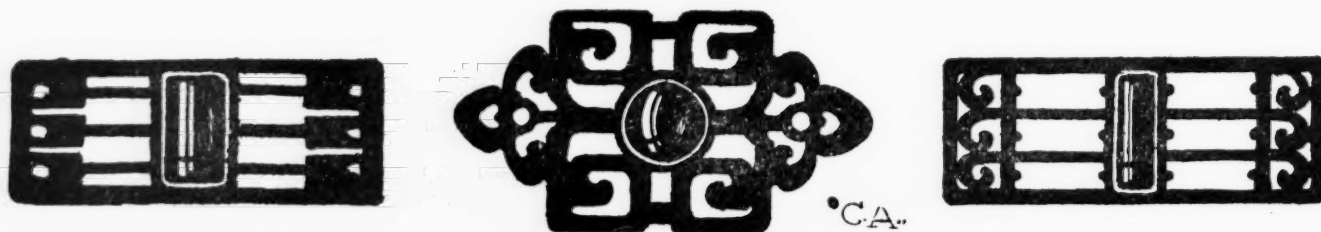
There are two reasons for a blast of air in the flame; firstly, it increases the heat of the flame tremendously by introducing oxygen into it; and secondly, it makes it possible to direct the flame to the very part of the work where it is most needed.

It will be discovered, by taking small bits of silver, placing them on the charcoal block and directing the flame upon them, that the heat of the flame varies in its different parts, according to the shape of the flame produced. A moderate pressure of air is sufficient for all of the work to be done for some time. A strong blast produces a raging, ragged flame.

The flame should now be directed toward the work, but not on it, heating the charcoal around it. The flame is then brought closer and closer to the bit of silver until it touches it. The bit



C.A.



of silver becomes red hot, glistens, then gathers itself together in a globe of shining molten metal. This is most fascinating to watch and a great deal can be learned about the variation of heat in the different parts of the flame.

With a few trials such as this one should soon become familiar with the flame, knowing just how and where to direct it, just the right amount of air pressure and the varying heat in the different parts of the flame itself.

The solder is now cut ready for the process of soldering. First it should be scraped with the scraper on both sides until bright, then slits as narrow as possible should be cut, about a quarter of an inch long. Now, holding the solder in the left hand between the thumb and the third finger, with the slit end resting against the ball of the index finger, cut across these slits, making tiny squares of solder. Resting the end of the solder against the index finger is to prevent the pieces, when cut, from flying around.

These pieces of solder should be placed in a small box and kept unexposed to the air when not working, as they oxidise very soon and then become difficult to melt.

The borax solution which is used for a flux is now prepared. A little water is poured into the borax slate, then the piece of prepared borax, which has previously been soaked in water to harden, is rubbed on the slate until the water becomes creamy.

The pickle, or weak acid, is the next thing to be made. A cold pickle will be used for the pieces during the making. About one part of acid to fifteen of water will be found satisfactory. Sulphuric acid is used. A tea cup of pickle should be sufficient. It should be put in a rather shallow earthenware or glass bowl. The acid attacks metal which should not be used, except in the case of "boiling out" pans which are made of copper. Iron should never be used, as it will discolor the metal.

In making the pickle great care must be taken always to pour the acid into the water, never the reverse, as this is liable to cause an explosion throwing the acid about. This might be very disastrous, especially if the acid were thrown in the eyes.

Everything is now ready for the soldering, with the exception of the pieces to be soldered together. Some scraps of silver which were left from the last problem, the pierced pendant (February issue), may be used to practice upon. Those parts

which are to be soldered together should be made very bright by scraping. If possible, the two pieces should be wired together with the iron binding wire.

Now with the small brush a little borax solution is run between the two pieces. With the same brush, moist with the borax solution, one, two or more pieces of solder, according to the size of the joint, are lifted and placed in or over the juncture of the two pieces of metal. The pieces of solder should now have a light coating of borax over them.

The torch being lighted, the air around the piece should be heated. Gradually the flame should be brought closer and then directed on the metal itself. If the moisture in the borax evaporates too rapidly, it will displace the solder. Should this happen, the solder should be picked up and again placed on the joint, coated with borax once more and then heated a little more gradually.

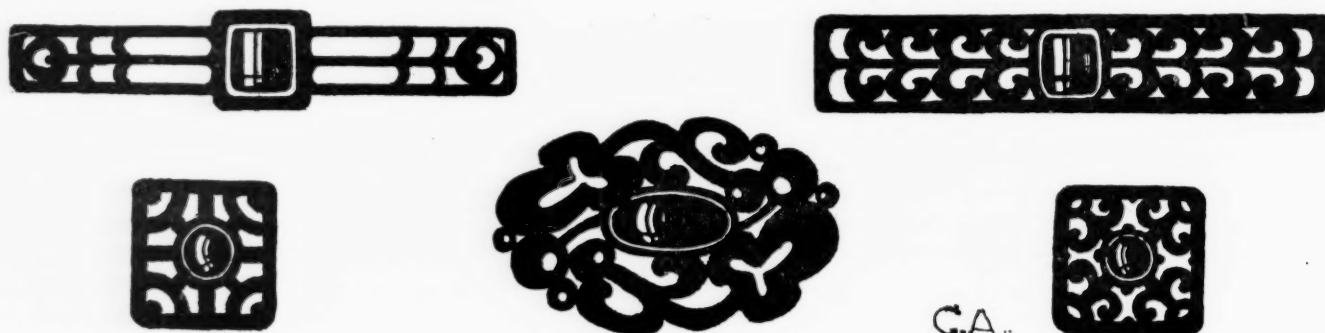
The flame should be directed on the parts farthest from the solder, for if the flame be directed upon the solder itself, the pieces being very small soon melt and either run on the hotter side of the joint, or up into little grains which are almost impossible to melt again. The solder should receive its heat from the other parts and, as metal is a great conductor of heat, the heat is soon conveyed to the solder. Care should be taken to keep the pieces to be united as near the same temperature as possible, as solder tends to run, when it melts, to the hotter piece.

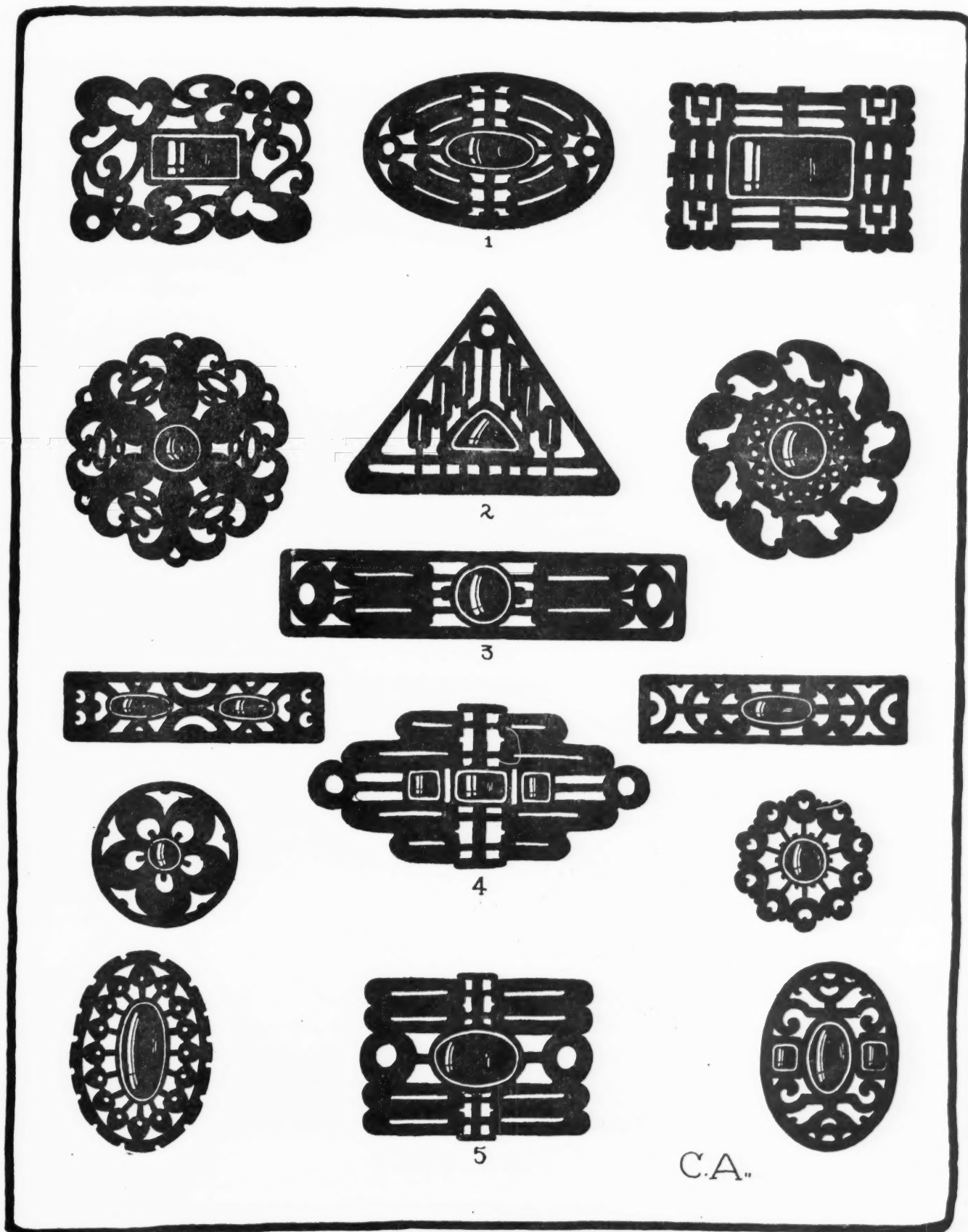
After the solder has run satisfactorily, the piece, by means of tweezers, is dropped quickly into the pickle, then removed with copper tweezers and rinsed in water. If the piece is bound with wire, this must be removed before plunging the work into the acid for cleaning.

Great care should always be taken to conserve all the heat possible. Never allow the flame to glance off the piece, but direct it so that the maximum amount of heat is converged to the metal.

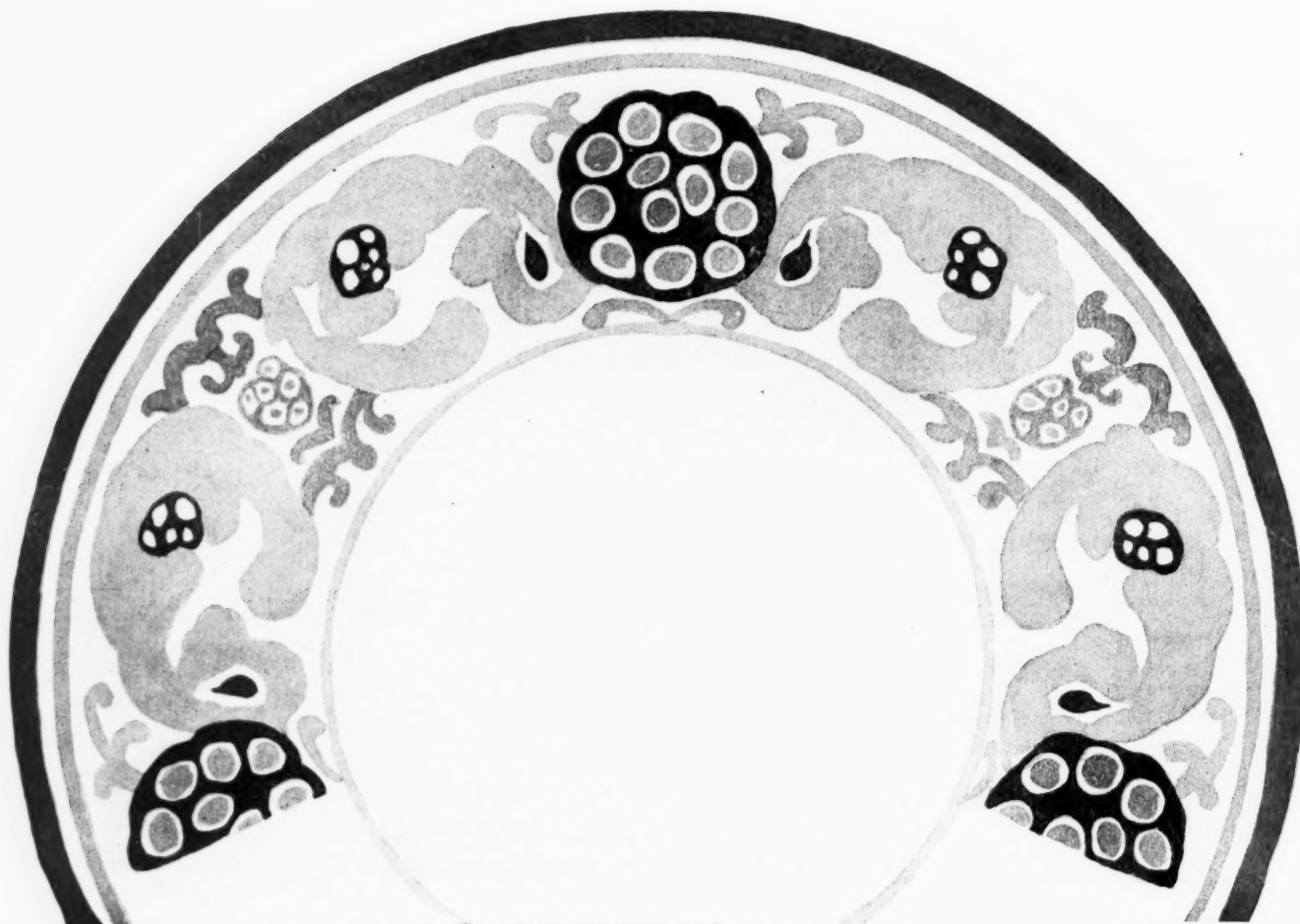
Volumes could be and have been written on the action of the flame and soldering in general, but one should be able, following these directions closely, to do creditable work and solder with little or no difficulty.

The next problem will be a brooch, design suggestions for which accompany this article.

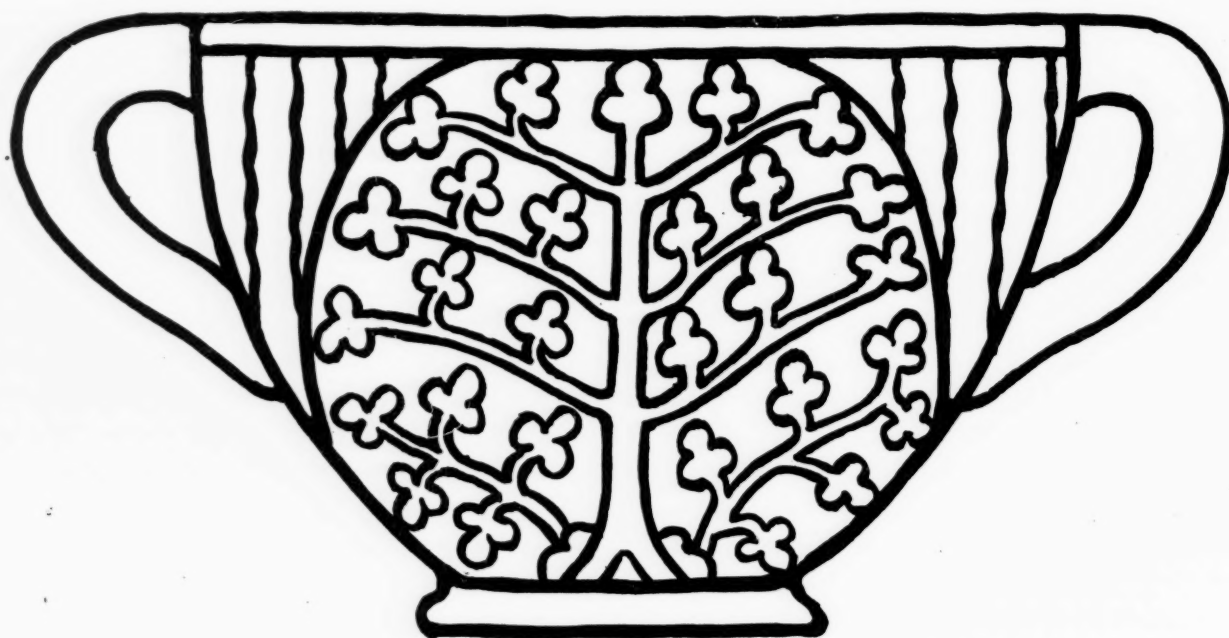




DESIGNS FOR PINS—CARLTON ATHERTON



PLATE—ELISE TALLY HALL



RUTH JOHNSON

Sugar Bowl of tea set in tracery pattern



RUTH JOHNSON

Tea Set in tracery pattern, from old illuminated initial letters



WOOD BLOCK PRINTING—CLARA STROUD

Part II

Continued from January issue

From the paper print you will know what size and shape and how much cloth to buy. This brings us to the question of what materials are printable. Those materials which are soft and have not too coarse a weave are the best. Among the cottons are cheesecloth, voile, and unbleached muslin. Linen is excellent for printing, but must be used damp. Pongee is good also. Silk takes the prints charmingly. Crepe-de-chine, Korean silk, (purchased in the upholstery departments) canton, silk poplin, faille, are all delightful in texture. Taffeta and satin are not right to print upon as their weaves are too even to give any quality to the print.

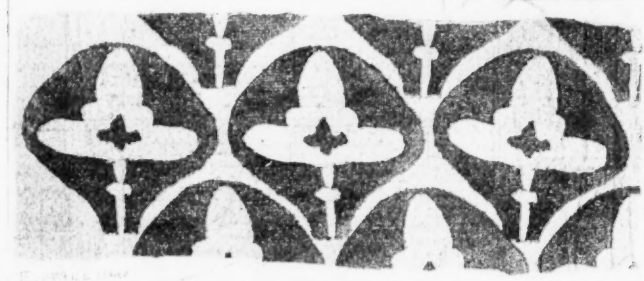
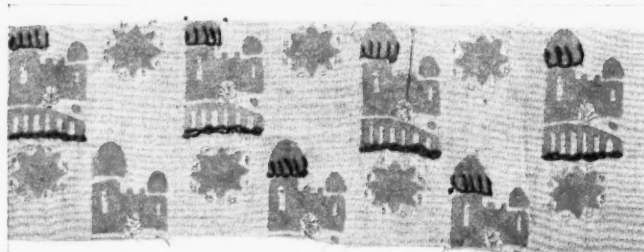
What color shall the material be? To a large extent that is governed by what you are making and where it is to be used. Do not use dark colors as the print will not show up well. Light and medium colors are best. There are wonderful grays and tans, marvelous blues and blue greens, greens, violets, salmon pink, cerise, etc. Buy more material than is required to have some extra for trying the color of the print.

A padded board on the principle of an ironing board is needed, on which to stretch the silk. This should be pinned along each edge about every inch. Be careful not to stretch the silk unevenly or the print will go "up-hill and down dale" when you take it from the board. The best guide lines are threads stretched across the silk and pinned to the board. These should go at right angles to each other. Start in the upper left hand corner of the material, leaving as much margin as you will need to make up the article. If you can stamp a row across and a row down with a true corner the rest can be gauged by your eye.

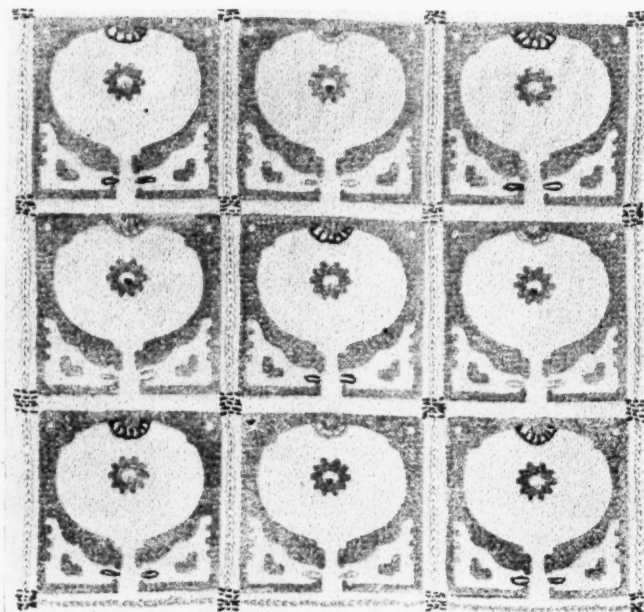
You have a little extra material on which to try the paint for consistency and color. If it is possible to go into a room all by yourself to print your material, by all means do so. You will need to give your undivided attention to the task, for a block put on in the wrong place or upside down, is there for keeps. Make some sort of a mark on the back of the block to help you keep it right side up. Place the large impressions first, then fill in with the smaller ones if there are such, and finally print the border blocks. Pin up the fabric to dry over night.

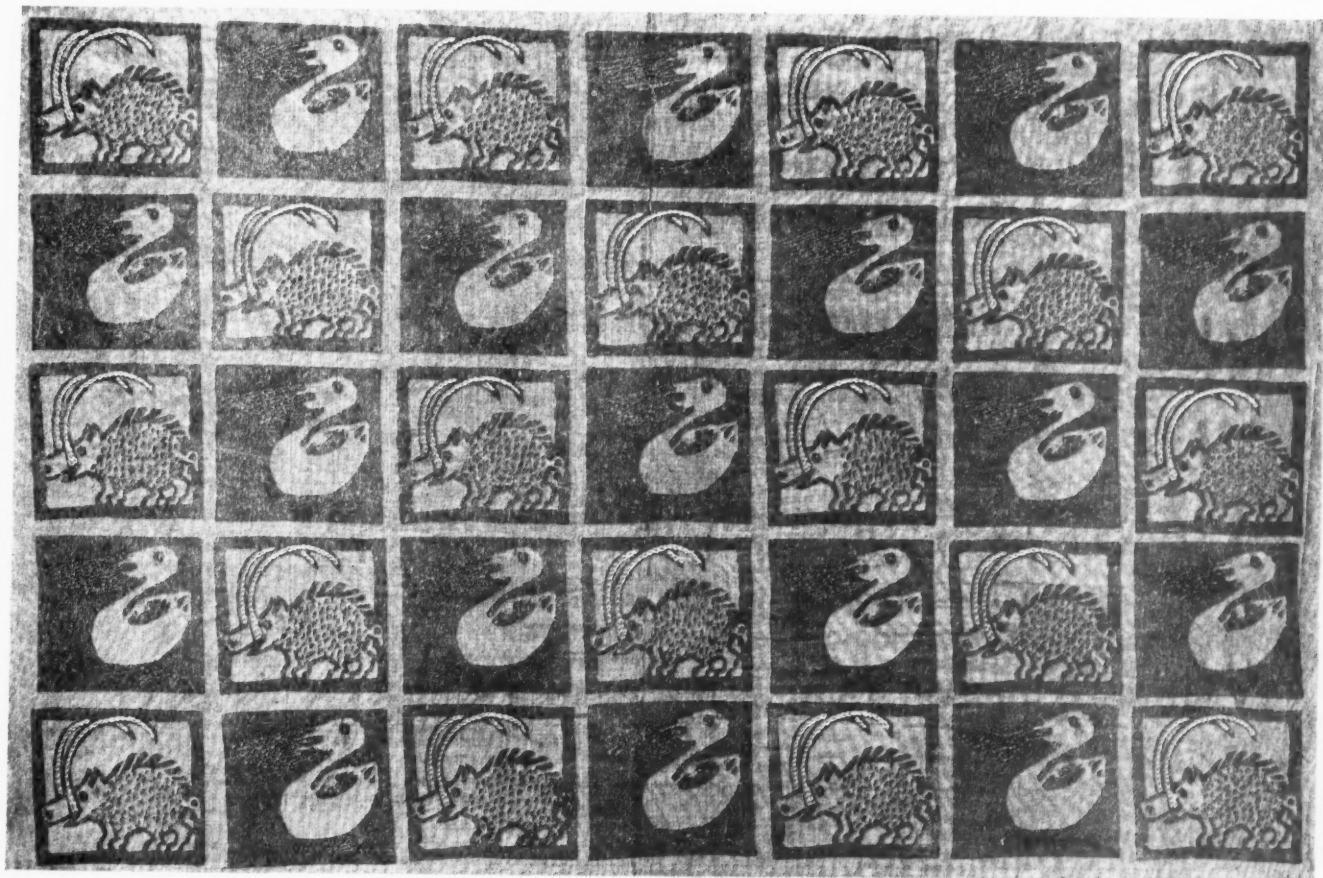
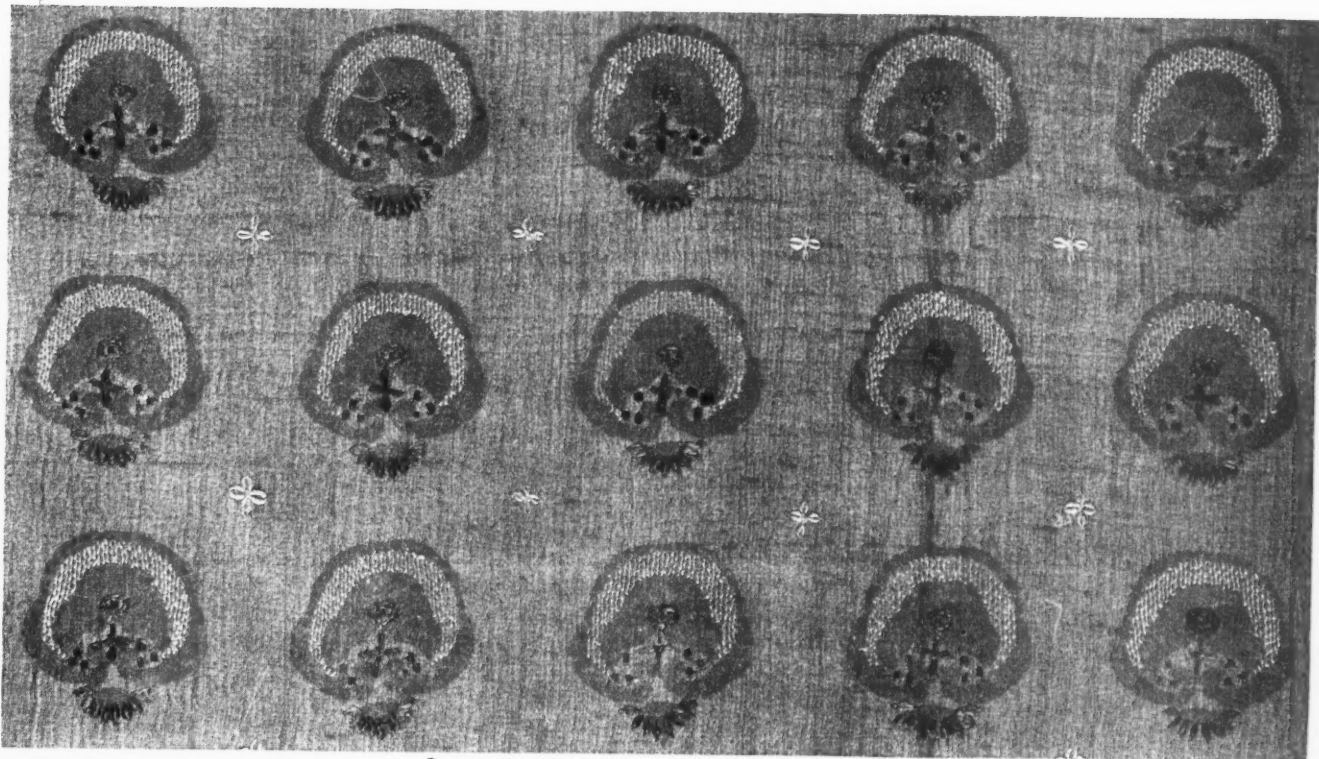
Will you want to work in some color in the way of stitchery? This should go where the gray value occurs if it is a medium color. Fill in the light colors of silk on the material itself. If you use dark silks, only a spot or dot here and there on the dark can be used. Do not fill up the entire dark print with embroidery and do not cover up all the silk spaces with stitches. What stitches can be used? The darning stitch is fine for filling in large areas of light, also the seeding stitch, feather stitch, chain stitch, lazy daisy, dots (but not French knots), button hole stitch, and many others when used in the right combination of colors add attractiveness to the textile. Spool sewing silks come in lovely colors and these, or any fine embroidery silk, may be used.

A suggestion of things to make may help those who have not something already in mind. There are bags of various sizes for various purposes. A scarf is a useful thing to make. Table covers and runners can be made to fit special pieces of furniture. A wood-blocked textile under glass, framed with handles, becomes a handsome tray. Curtains and draperies are enhanced by individual wood block designs. Sofa pillows

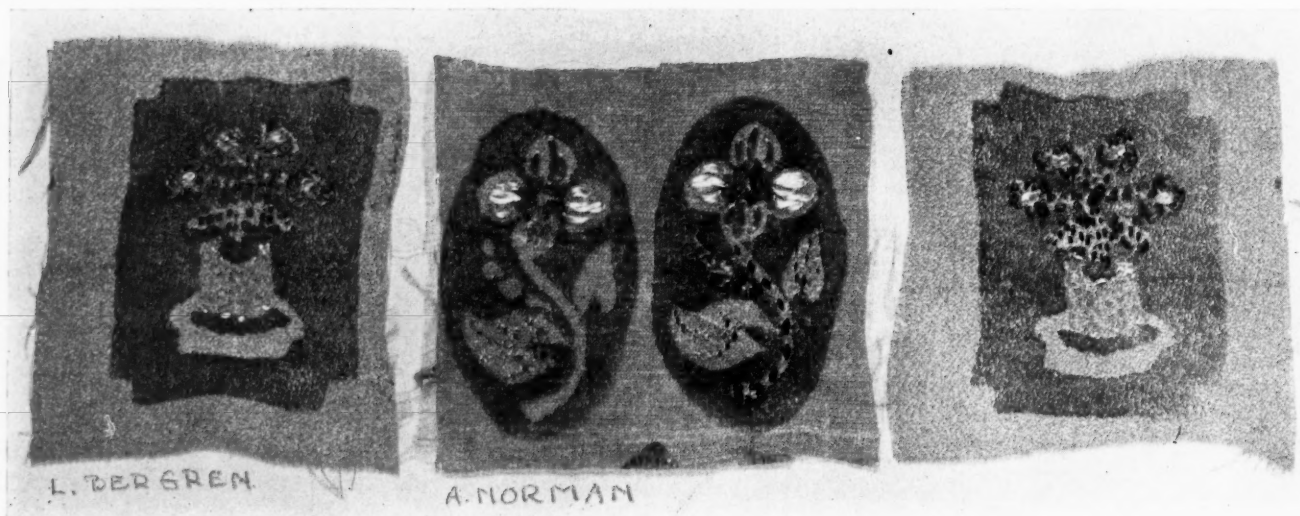


E. HALLOW



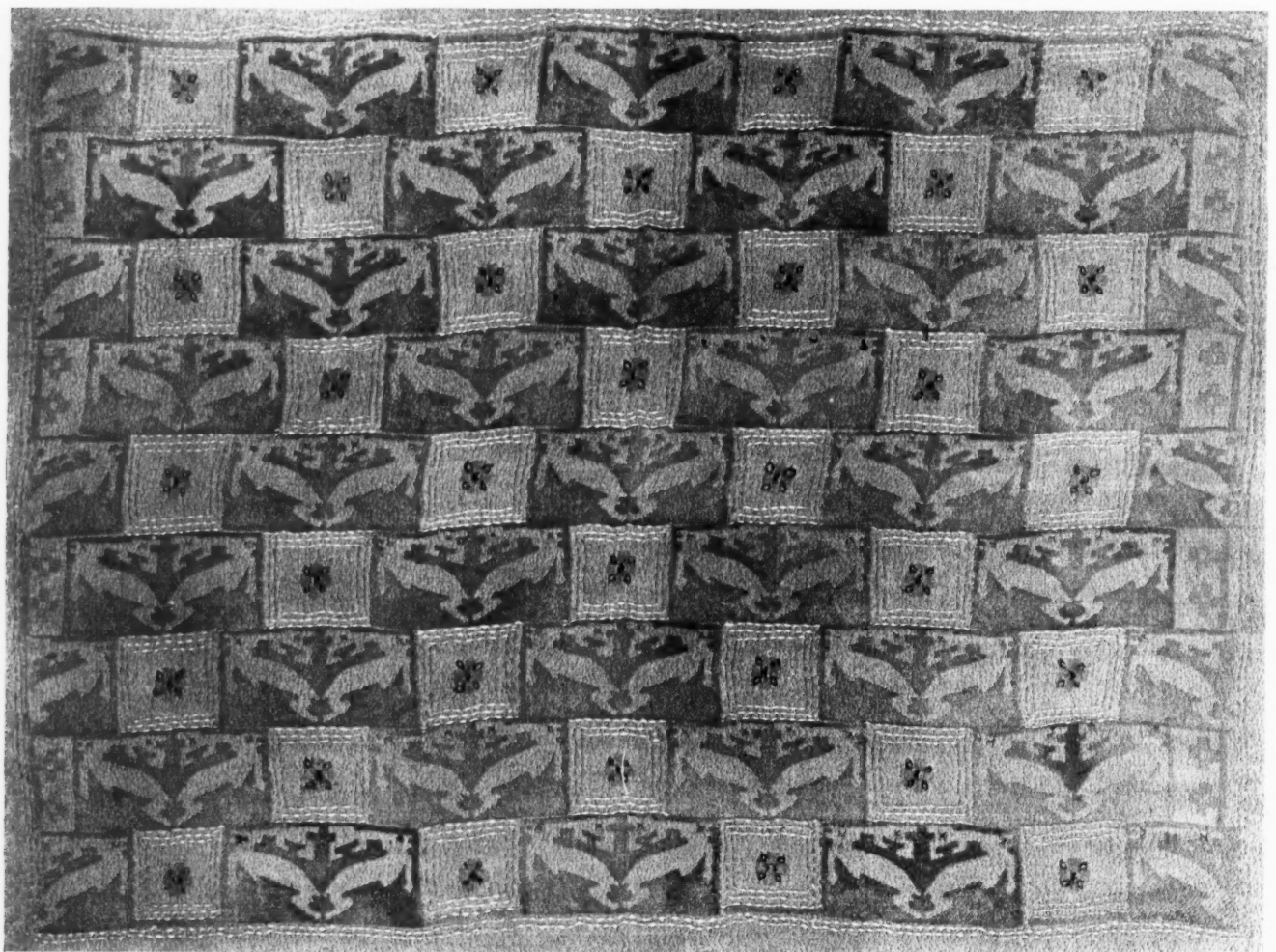


WOOD BLOCK PRINTS

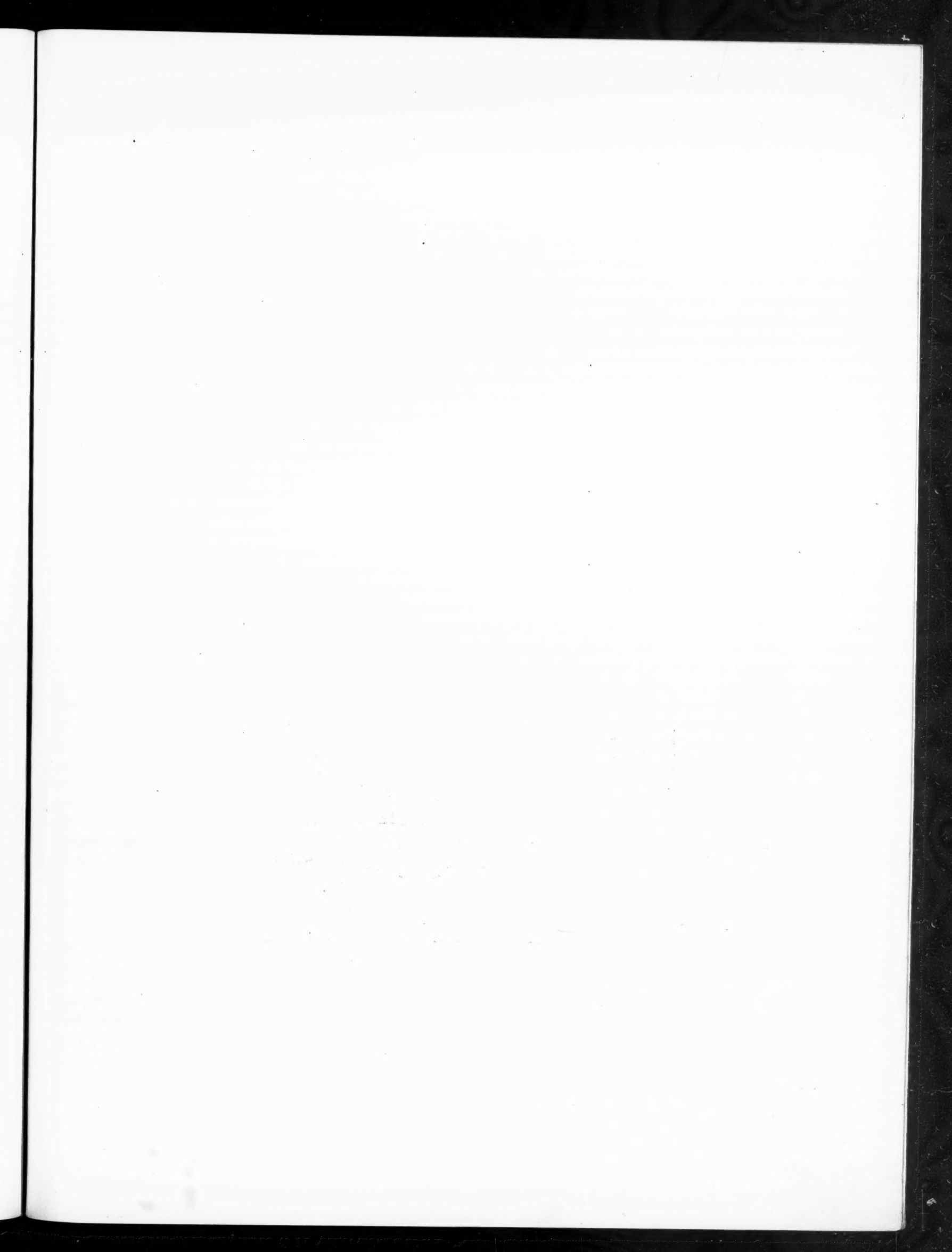


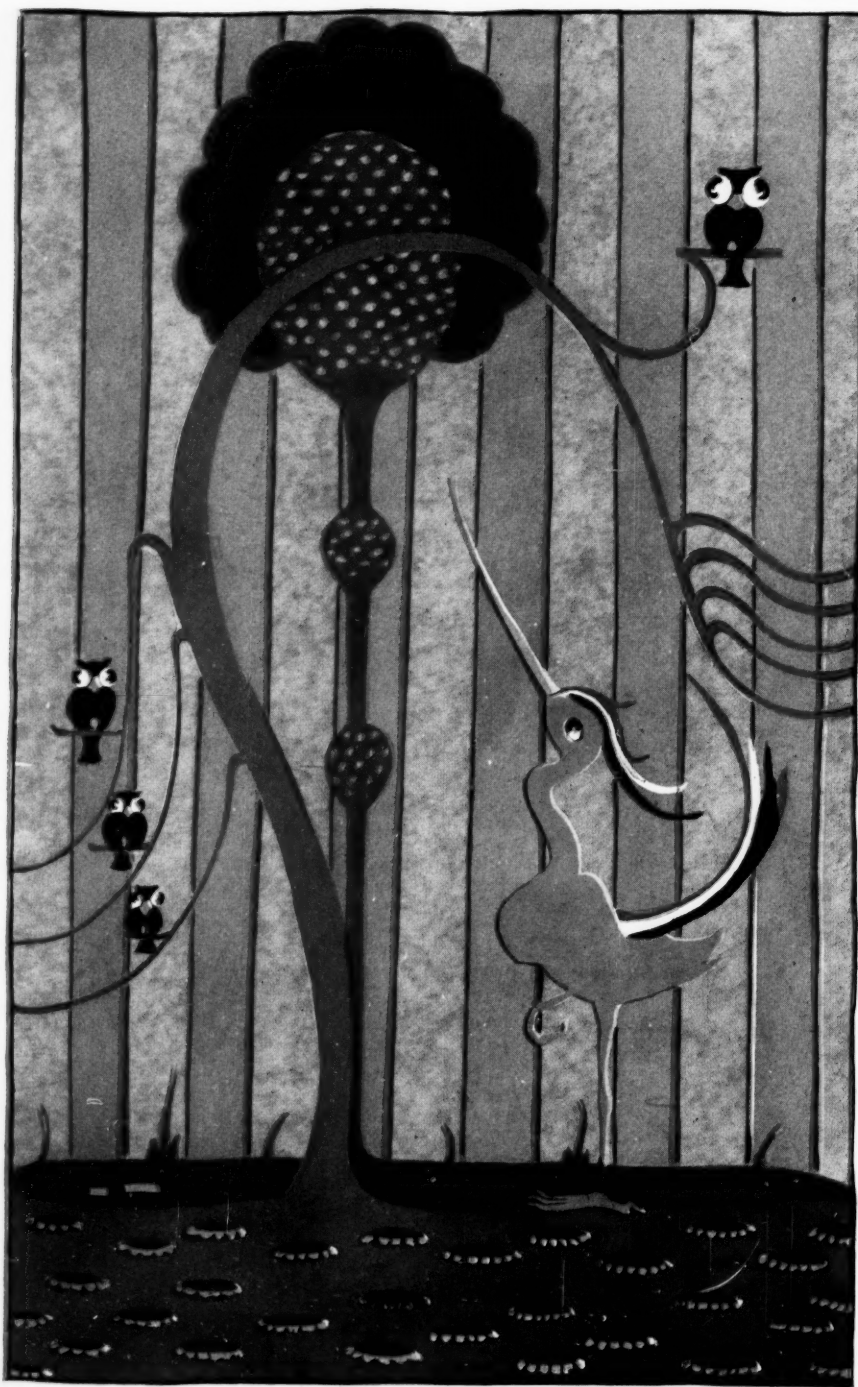
and many things for the home can be block printed and embroidered to give that personal touch every woman desires. Be not impatient over the designing of the block, but remember

that it will be worth while to take time over the design, as once the block is cut it lasts forever. It can be used again and again to print many things.



ANNA I. GIROLAMO

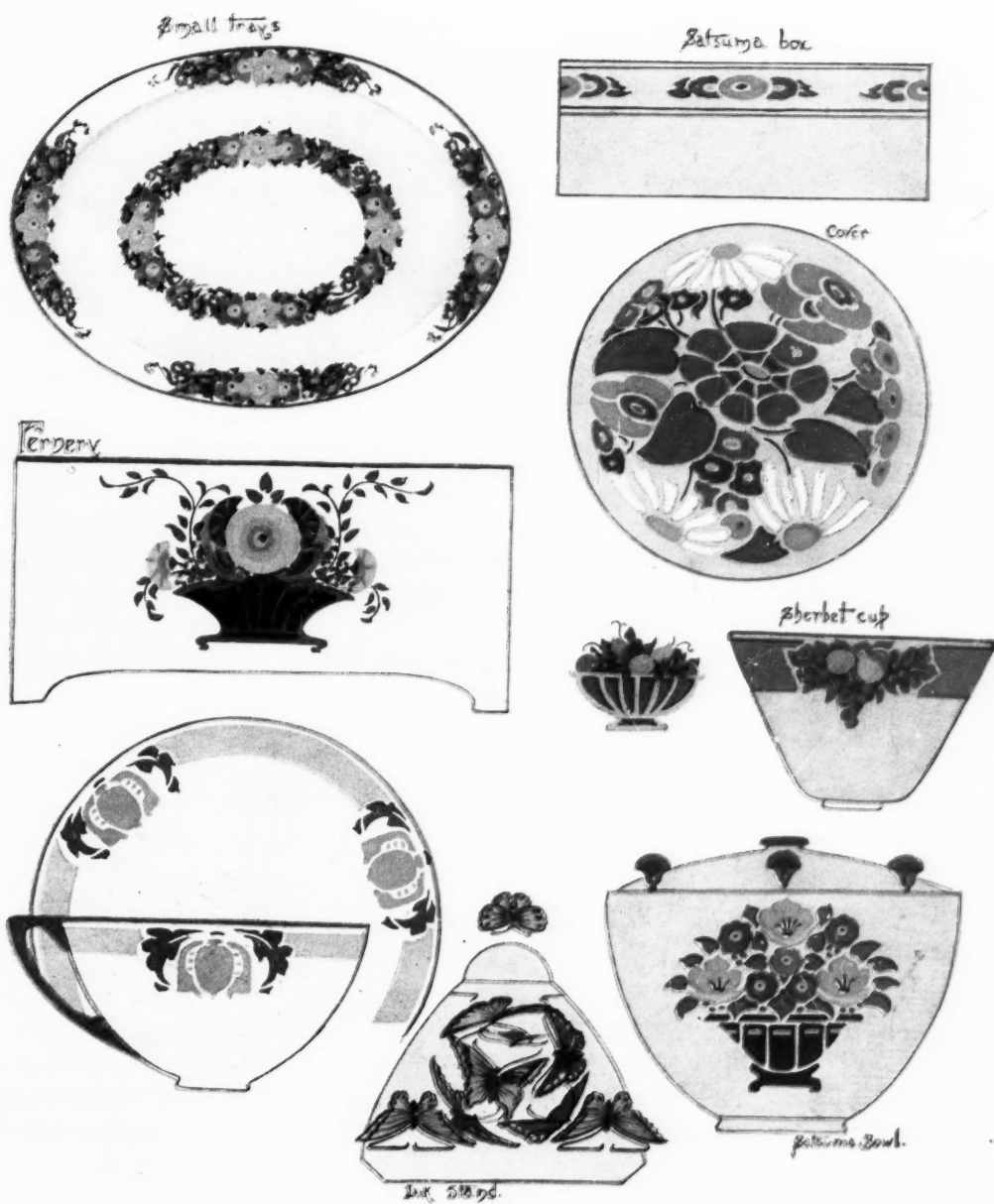




DECORATIVE PANEL—FRANCES ROBINSON, MONTANA STATE COLLEGE
SUGGESTED BY EUGENE FIELD'S "DINKY BIRD"

APRIL 1925
SUPPLEMENT TO
DESIGN
KERAMIC STUDIO

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DECORATIVE SUGGESTIONS FOR CHINA—HENRIETTA B. PAIST



MAY WARNER COLE

Edge black with line of light yellow green between black and blue violet ground of wide rim. Center ground black with red orange edge. Figure in light yellow green, also the second of the three scrolls with a line extending to triangular spot in drapery which is red orange and blue violet, extending up from the rim and edge. Hair, lips and end of scarf over arm, red orange.

We are sorry that we cannot show these designs in color; they are most unusual both from the standpoint of color combination and of values. We have too long limited ourselves to birds, flowers or animals as our only motifs. Let us, using these illustrations by May Warner Cole as an inspiration, see what *we* can do with the human figure. It is not easy and it will tax both our ingenuity as designers and our ability as draughtsmen. To conventionalize or caricature a figure, a perfect understanding of its different parts and their relation to each other is necessary.

If we find after some practice that we can fit the human figure to a given space, let us try making conventionalized every day scenes, as Miss Johnson did in her textile designs in March issue. So many of us miss the beauty of the common things

about us. For instance, how many of us see the beautiful patterns reflected on a wet pavement from the traffic lights and shop windows? Do you look a second time at a balloon man or an Italian flower girl? Are you not thrilled on circus day by the gorgeous display of color, the eager crowd, the happy children?

There are any amount of subjects to be had which are American. We, as Americans, should build up an American type of design, using incidents of every day life. We could use as subjects such things as: Kite Flying, Fourth of July, May Pole, Dance, Fishing, Hunting, Halloween, The Organ Grinder and his Monkey, etc. Try some of these and see what you can do in the way of arrangement of dark and light, rhythm, and brilliant, charming color schemes.—Ed.



MAY WARNER COLE

Center of plate, deep orange. Scalloped border, deep sapphire blue, also oval mound below animal. Background of animal is light greenish tan. Crescent shape is a deep blue green with grass spears of yellow green, sapphire blue, black, orange and red orange. Stems, grass and centers of flowers, deep blue green. Flowers are yellow, orange and red orange.



MAY WARNER COLE



BONBON TOP—MAY WARNER COLE



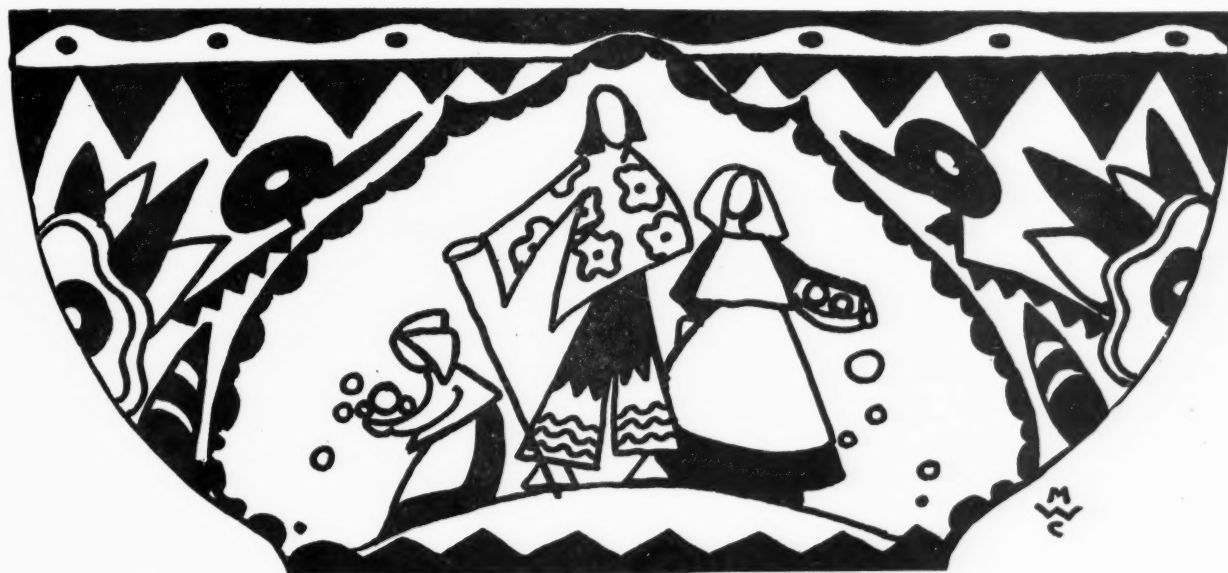
PITCHER—MAY WARNER COLE

Black ground. Flower from top down is red orange, red violet, black, red orange, with spots of corn color and black center. Upper leaves peacock green, lower leaves pale yellow green with black spots on corn color. Handle and spout of pitcher red orange and black. Top border, from top down, red violet line, red orange ground, pointed spots of peacock green with pale yellow green dots and black markings. Black line. Corn color line. Lower border, from top down, peacock green with corn color spots, red orange, corn color line. Black spot and edge.



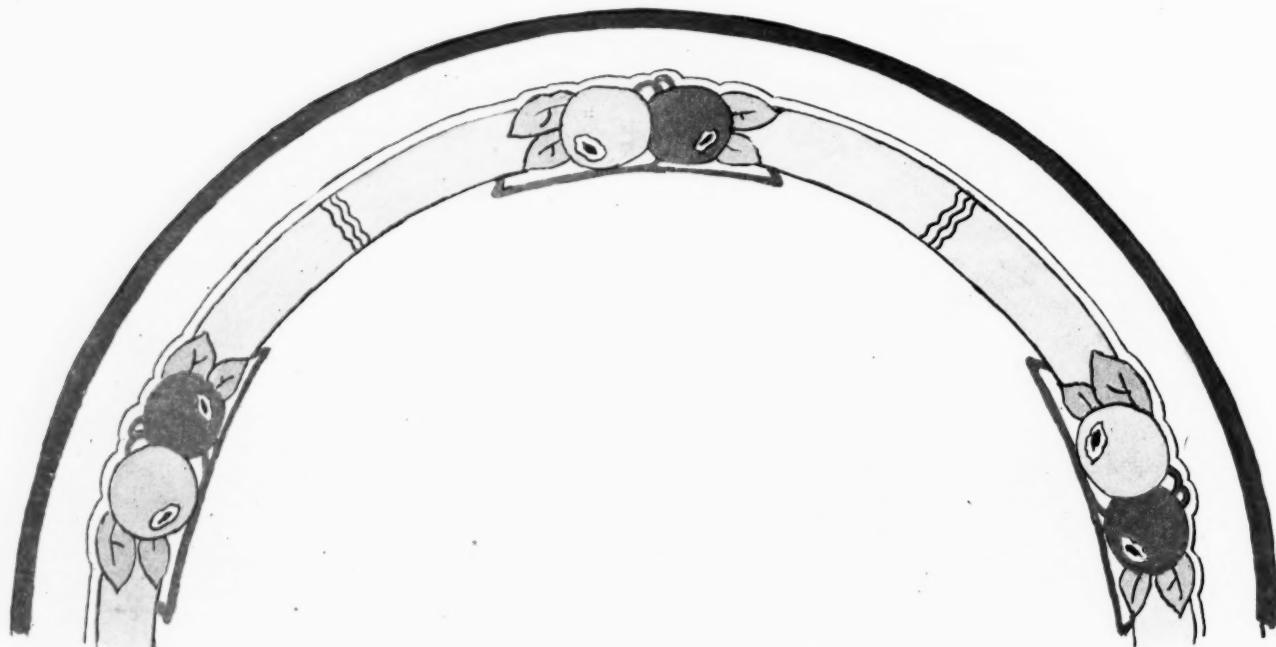
PITCHER—MAY WARNER COLE

Ground, greenish tan. Border and medallion design in red orange, violet and black.



RUSSIAN MOTIF—MAY WARNER COLE

Design in black, background of figure panel, deep yellow, of flower panels, deep orange, design touched in with blue violet, crimson, orange, red orange, and deep yellow.



BEGINNERS' CORNER

Jetta Ehlers . . . 328 Belmont Avenue, Newark, N. J.

THE USE OF OUTLINE

THOUGH little of the work done today is outlined, there are certain designs which seem incomplete without the addition of it. The design given for this month's problem is an example of the sort of thing that seems to require it. But we will give a little different touch to it by outlining with the same colors used in the treatment of the motif instead of the usual hard black line. Many beginners make a great fuss about doing outlining, and yet, with the proper tools, it need not be the bugbear that so many make of it. There are several ways in which it may be done. Firstly, there are two types of medium used, one having an oil base, usually oil of anise, and the other either sugar or gum arabic. The first mentioned may be used with either brush or pen, but can not be worked over before it is fired unless one is expert, and then only with reservations. So that is not for the beginner. The second class may be worked over without fear of disturbing the line in any way, as it dries at once. For our problem we will use this method as in every way it is the best for a beginner. For the sugar medium seven table-spoonsful of water and one of sugar is the proportion. You may use hot water for this and let it come just to the boiling point. Do not let it cook or become thick and of course cool before using. This may be bottled for future use. The gum arabic mixture is simply a thin solution of the gum in water. In either case one proceeds in exactly the same way in working. We will use a pen instead of brush and care should be taken in choosing one. The small drawing pens are not very satisfactory as they very soon lose their spring. The ones I have found best are the Gillott No. 170. These have a fine point, are somewhat stiff, and yet pliable without being soft. A soft pen, one which spreads, will never make a good line. The position in which one holds the pen is important. Use it as nearly perpendicular as possible and without any pressure at all. Do not hold the pen in a vise-like grip or bear on heavily if you want good results.

Another point to remember is that this sort of mixture dries very quickly and must be constantly thinned and mixed with water. Then too, the color will dry on the pen, clogging it, so that frequent washing of the pen will be necessary. With these points in mind let us proceed with the work. Having divided the plate in five sections, trace the motif and transfer to the china, using graphite impression paper. The colors used are Yellow Brown and Yellow Red for the apples, Apple Green for the leaves with band on edge, wavy line in border and outline on outside of border of Yellow Red. The band which connects the motifs is equal parts of Albert Yellow and Yellow Brown used thinly to make a light ivory. The outline must be done first. Upon a clean slab place some of the powdered color and use just enough medium (the gum solution) to bind it stiffly together. Thin this with water so that it will flow freely from the pen, testing it before proceeding with the plate. Use Yellow Brown first for lightest apple and for an outline on the band of tinting. Use Yellow Red outline next for darker apple and wherever else it is used. Do the leaves with Apple Green, also stems. The outlining completed next paint in the colors using a small square shaver, No. 4, and keeping the color clean and crisp. Do not fuss over it but try to lay it in with as few brush strokes as possible. This is all painted in full value, that is, not with a weak wash of the color. Of course this is all done with color mixed with regular painting medium as for ordinary work. When the plate has been fired, re-outline, touch up any weak color and repaint band on edge. If color has been carefully laid the first time it will not need going over again but the outlining usually does. The completed plate you will find makes a gay bit of color for either fruit or salad course and quite fits in with the mode for bright things. And now one or two "do not's" to close our lesson.

Do not use too much outline medium. If it looks glossy and does not dry quickly you have done so and the outline will be sticky and unworkable. Add more color and regrind. Do not pile on the color as it will be liable to chip. Do not use too much water or color will be thin and poor. Experience will soon teach you the "just right" of it. I want to make a correction in regard to using full value of the color in painting the apples. The lighter one should be about half value.



TEA JARS

JAPANESE POTTERY

Carlton Atherton

Illustrations by Adelaide A. Robineau

THERE is probably no subject more interesting to the student of art, and none which is more difficult to describe in adequate terms, than that of Japanese Art. It is so varied that it could be and has been carried out into volumes. Limitations will here be made to the pottery of Japan. Even then no attempt will be made to embrace the whole field, which is so large; we shall only attempt to point out, to the potter especially, the infinite possibilities in variety of shapes which are open to him. The Japanese have a restless love of variety.

China and Japan being in such close proximity, one would naturally suppose that their manners and customs would be very similar, and hence their arts. This, however, is not the case, for few, if any, bonds of sympathy exist, and there are very few outward marks of similarity in their works. In their art works, even when the materials used are almost identical, there are so many and so marked differences that one might suppose that vast oceans separated the countries.

We cannot, even hastily, glance over the wide field of Japanese art without being struck by the loving appreciation of the works of nature which it displays. The Japanese artist is indeed an ardent student of nature, he watches her silent doings with keen perception and notes her changes of mood and costume with loving eyes, until each detail and expression of her ever changing face becomes imprinted on his mind, to be transferred to every work he sets his hands to do.

Another remarkable trait in the character of the Japanese artist is his keen appreciation of, and intense love for the humorous and the grotesque. Nearly all branches of his work give evidence of this. Occasionally his humor develops into broad caricature. He is, however, almost unerring in his judgment regarding the fitness of things.

Few things claim the admiration of the art student more than the power of expression, combined with simplicity of treatment, which Japanese art almost invariably displays. This not only refers to drawing, but to the characteristic method of representation of any object or idea in any medium.

The art of pottery making in Japan, without doubt, dates back to a very early date. It was introduced in the country by workmen of Corea, where it had been known some time previously. It is unquestionably of Chinese origin and was learned by the intelligent Coreans from Chinese experts.

Japanese legend states that pottery was made in Japan by Oosiu-Isumi before the time of the Japanese Era, 660 B.C. Nothing is definitely known about that. However, since the propagation of a new religion from one country into another

has invariably for result that the country where the religion originated exerts a strong influence on the manners, customs and art of the other country, it has reasonably been supposed that Japanese pottery dates back to the middle of the sixth century B.C. It was at that time that Buddhism was introduced from China, through Corea, into Japan.

The accompanying illustrations will give some idea of the variety of shapes used by the Japanese potters.

The tea jars, usually in stoneware, are most interesting. The greatest imagination is displayed in their execution. Some are ribbed vertically; others have horizontal ridges, either partially or wholly covering the sides. Curious masks are sometimes used to decorate them. A band of excised decoration around the neck is found on some pieces, others are covered with intricate diaper patterns. These jars are usually glazed only about three-quarters of the length from the neck, leaving the lower portion bare. At times they are glazed only on the necks and shoulders.

The covers are fascinating and often most ingenious. There is generally an inner and an outer cover, the inner cover being flat with a tiny knob. It is used to keep the jar as air tight as possible. The outer covers are at times delicately carved, though usually plain but beautifully thought out in proportion to the jar.

The diversity of line and decorative treatment of the tea cups and bowls is amazing. The curve is usually very subtle, though sometimes quite bold. The decoration is almost invariably either in underglaze or overglaze colors.

The Japanese gloried in the use of the ovoid, of the single and double gourd shapes. Unlimited variations of these shapes are to be found in their pottery. Potters will do well to study these and to note how slight a variation in the profile changes entirely the character of the piece. They should note also the rhythm of line and subordination of masses in these shapes.

Nothing seems so typically Japanese as their teapots. They are the most charming pieces of color, shape and decoration imaginable. It was stated above that the Japanese have a restless love of variety. Nowhere is this shown more clearly and brought to us more forcibly than in their teapots. The variety in shape is astounding; the variety of color seems limitless; the variety of decoration, both in design and treatment of the design, is wonderful.

A visit to the Japanese departments of the Museums, especially of the Boston Museum, is no end of inspiration to the art student. The keen perception of the Japanese for beauty in the commonest as well as the rarer and more conventionally beautiful things should be a point to be grasped by all, and applied to our work, no matter whether it be architecture, painting, sculpture or craftwork of any kind.



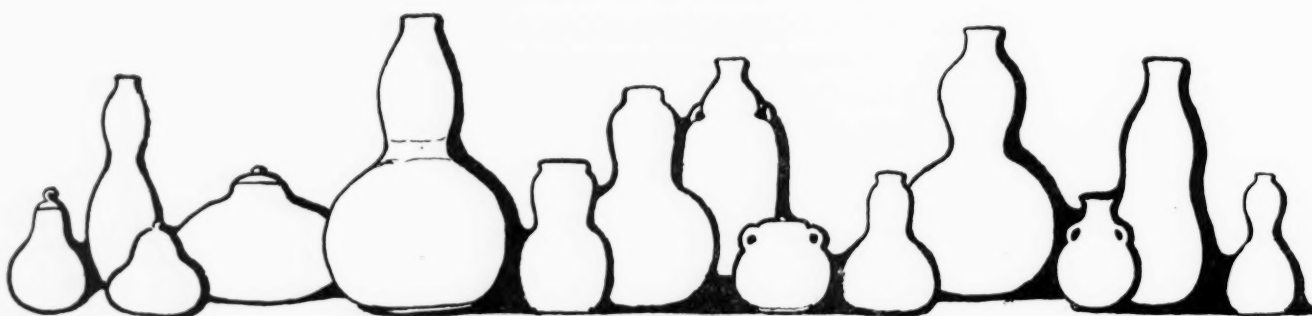
TEA CUPS AND BOWLS



VARIATIONS OF THE SINGLE GOURD



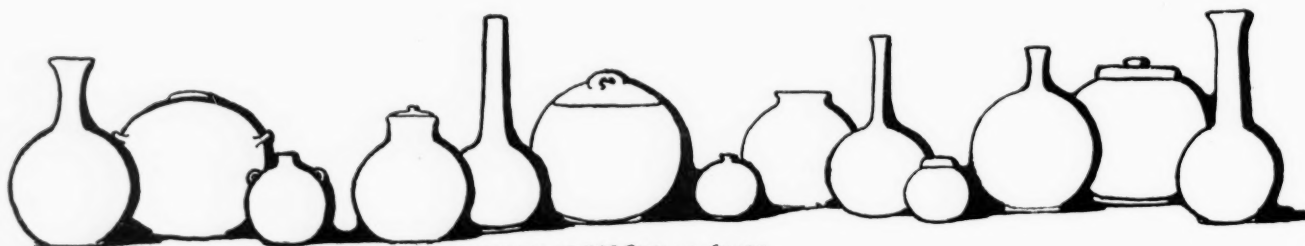
OVOID SHAPES



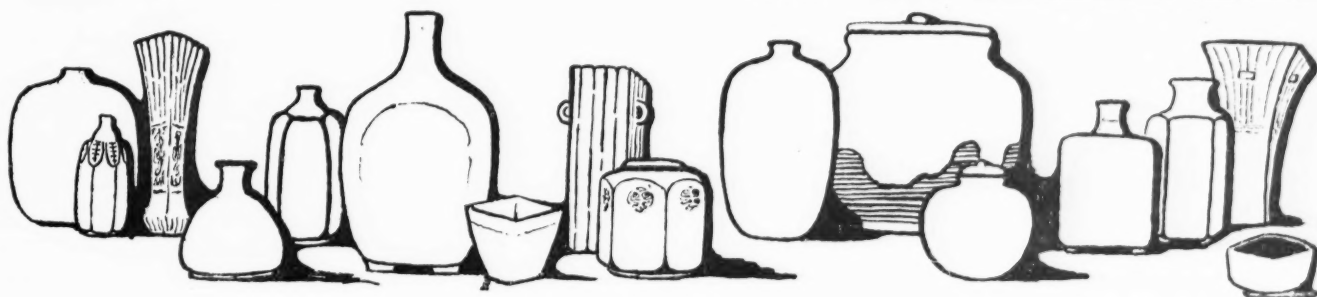
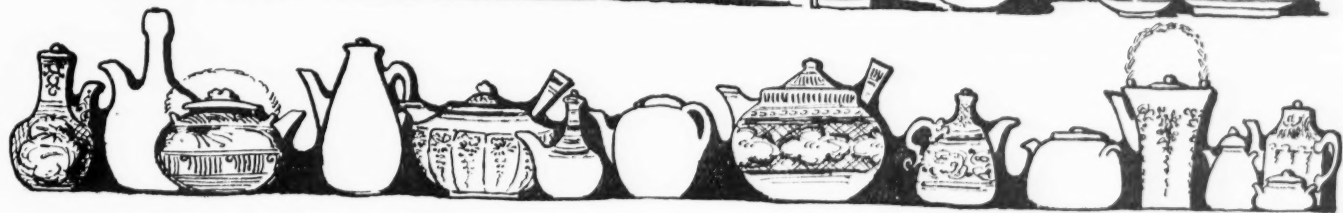
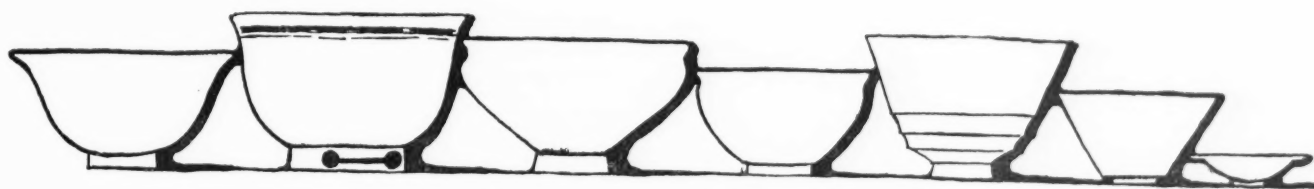
VARIATIONS OF THE DOUBLE GOURD

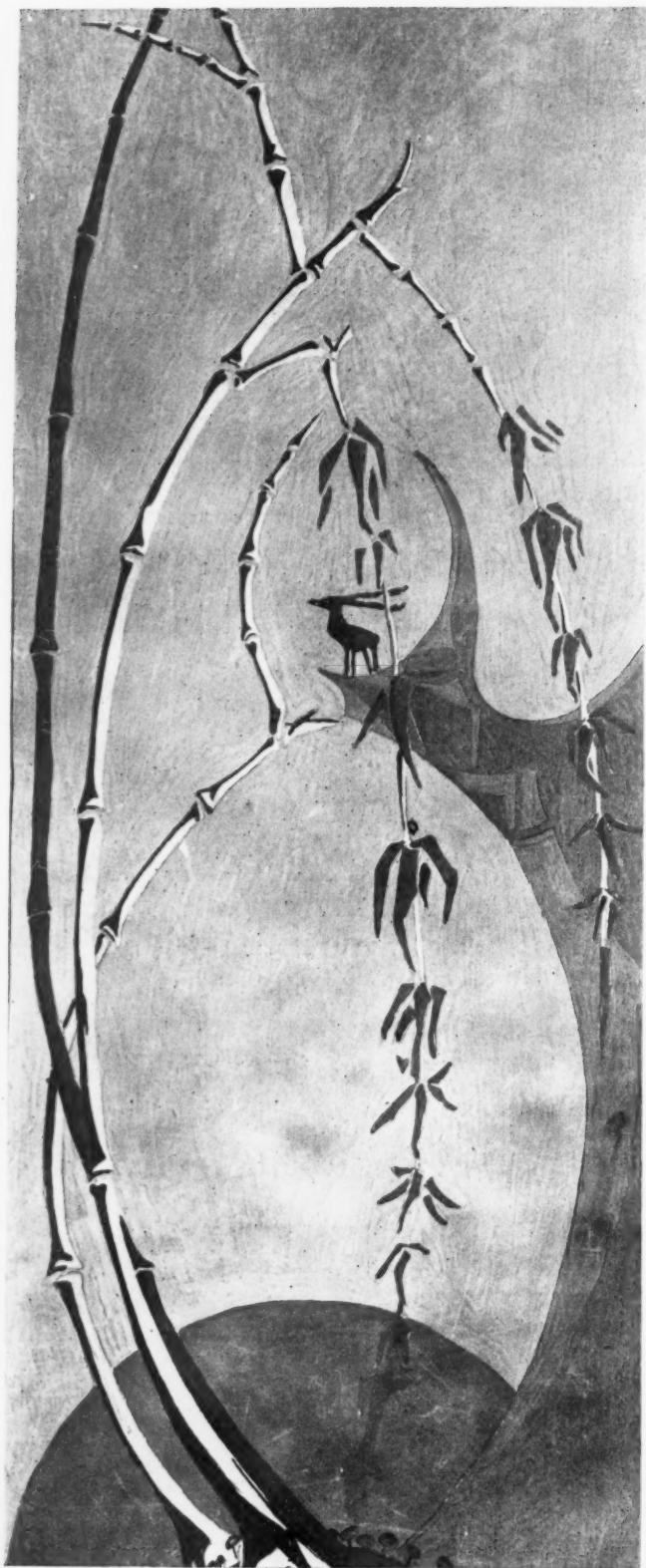


VARIATIONS OF THE DOUBLE GOURD

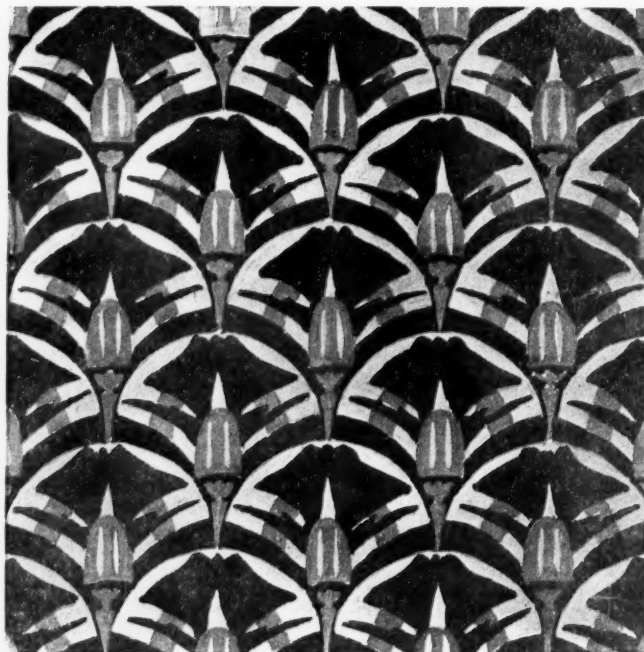


VARIATIONS OF THE SINGLE GOURD





Decorative Landscape
OLGA NEYDEMEYER
Montana State College

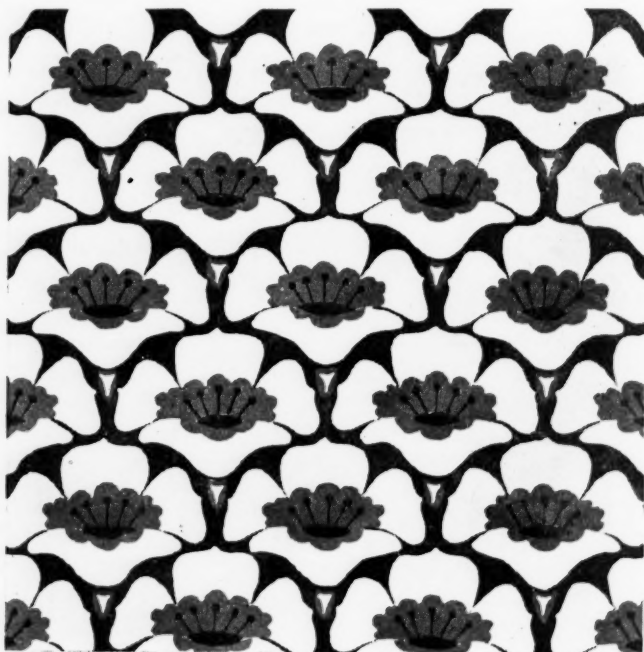


FRESHMAN CLASS
Montana State College

MONTANA STATE COLLEGE
Olga Ross Hannon, Instructor

The Composition class is the get-together class. It alternates with lectures. Students are required to bring to class for criticism work done independently from given subjects.

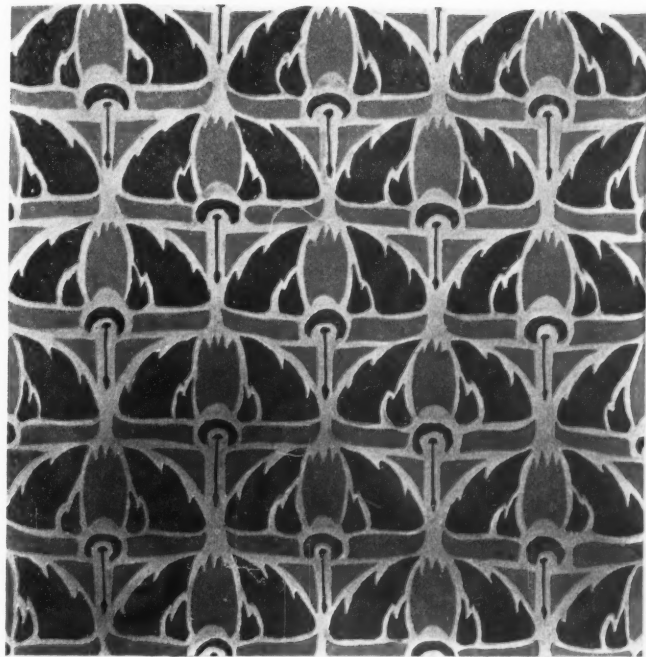
The three landscapes in black and white and the color supplement by Frances Robinson are some of the compositions brought to class when the subject was "Decorative Landscapes." The other designs are examples of the work done in the Freshman class.



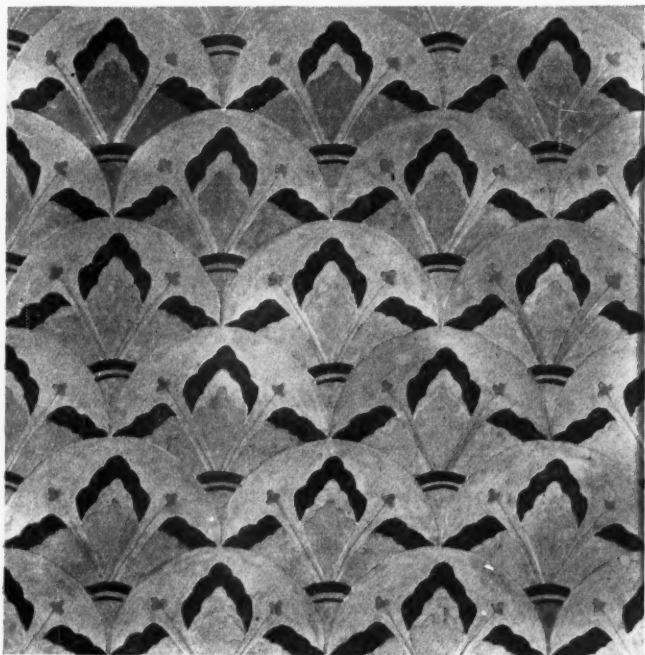
FRESHMAN CLASS
Montana State College



DECORATIVE LANDSCAPE—FRANCES ROBINSON
Suggested by Eugene Field's Japanese Lullaby
Montana State College



FRESHMAN CLASS
Montana State College



FRESHMAN CLASS
Montana State College



DECORATIVE LANDSCAPE—CARLI REDDOUT
Montana State College

ART NOTES

The Eastern Arts Association will hold its sixteenth annual Convention in Springfield, Mass., April 23, 24, 25, 1925.

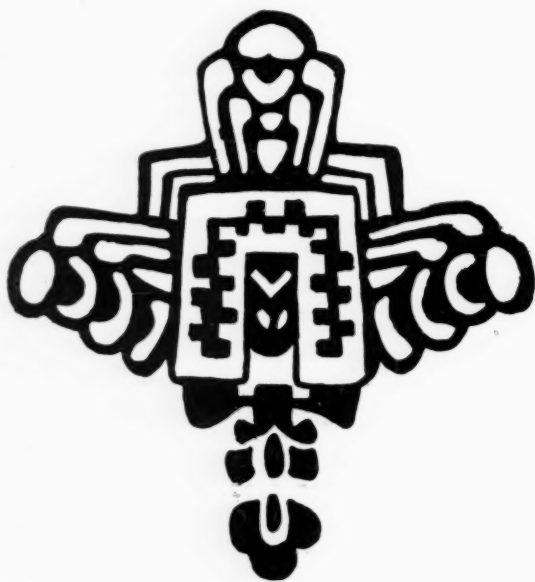
The Western Arts Association will hold its thirty-first annual Convention at Memphis, Tenn., May 5, 6, 7 and 8, 1925.



DESIGN FOR BOX—WOOD MORGAN

Large daisy, light yellow, center orange, half circle in center red, points from center gold. Small daisy deep yellow, center orange. Flower above large daisy light cobalt blue. Center yellow, half circle orange. Flower with petals lavender, center orange and red. Small flower light blue with half circles on

edge of deeper blue, yellow cross in center. Stems and leaves in green, background in gold. Outline design in black. Narrow band around medallion violet. Paint box with black enamel paint. Flowers on band around lower edge of box, same colors as medallion. Background of band in gold.



DEANE W. STARRETT

ANSWERS TO CORRESPONDENTS

Q. Can I use Albert Yellow and a touch of Red for center of violets?

A. Albert Yellow which is one of the strongest colors on the palette can not be used with any of the Reds. The Red will entirely disappear in the firing. Clean the color from center of the violets with tooth-pick and cotton. Lay in light wash of yellow, then with tooth-pick and cotton again wipe where touch of Red is wanted before laying it in.

F. B.—Could you give a color scheme for the vase by Alice Seymour on page 209, March, 1925?

Ans.—Use a color scheme ranging from Rose, Ruby, Blue Violet, Red Violet to the deep Blues. A warm green such as Yellow Green to a deep cool green. Background could be black.

C. E. P.—Where may I obtain a palette for several of your studies? I have tried many blues which do not compare with your colors. For instance what blues are used for Kelley's vase in September 1920, Campbell's plates in November 1920 and Beverly's bowl in February 1921? Is it better to use Roman and unfluxed gold mixed, or unfluxed alone, for Satsuma ware? What cone should be used for ordinary yellow earthenware?

Ans.—The blues used in these studies are enamel colors with the exception of the bowl. You have perhaps tried to get with overglaze colors a quality which only enamels will give. The blue in the vase is Ming Blue, the dark tone Old Chinese Blue or Cobalt Blue. The blue in the plates is largely Cobalt Blue or Canton Blue, all of these enamel colors. The bowl is Royal Blue (not enamel), the effect being obtained with several washes.

Use unfluxed gold for all soft ware, or a mixture of Roman and Liquid Bright Gold.

B. F. Drakenfeld & Co. will furnish you cones for low fire for earthenware.

